

v

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,478	01/29/2004	Helmut Fitz	2004_0121A	3722
513 WENDEROTI	7590 12/28/2007 H, LIND & PONACK, L.L	EXAMINER		
2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			TRAN, HANH VAN	
			ART UNIT	PAPER NUMBER
			3637	
•			MAIL DATE	DELIVERY MODE
			12/28/2007 .	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 10/766,478 Filing Date: January 29, 2004

Appellant(s): FITZ, HELMUT

DEC 2 8 2007

GROUP 3600

Mr. W. Douglas Hahm For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed September 13, 2007 appealing from the Office action mailed December 18, 2006.

10/766,478 Art Unit: 3637

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

10/766,478 Art Unit: 3637

(8) Evidence Relied Upon

English translation of foreign documents listed under this section is attached as an Appendix to the Examiner's Answer.

NZ 507687	Murdoch	09-2001
3,075,820	Humphrey	01-1963
4,090,753	Rock et al	05-1978
AT 404664	` Brustle	01-1999

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

(A) Prior Art Rejections

(I) Claims 27-34, 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over NZ 507687 to Murdoch in view of USP 3,075,820 to Humphrey and USP 4,090,753 to Rock et al.

Murdoch disclose a drawer comprising all the elements recited in the above listed claims including, such as shown in Figs 2-3, two drawer frame members 8-9, a rear wall 7 attached to said drawer frame members, a drawer bottom between said drawer frame members, a front facing panel 10 attached to said drawer frame members, said front facing panel including at least two panel portions and arranged so that the front facing panel is angled inwardly to form a right angle to each other, the rear wall angled outwardly from the front facing panel including two rear panel portions connected together to form a right angle to each other, wherein the rear panel portions being fixed to the drawer frame

10/766,478 Art Unit: 3637

members by separate holding members. The differences being that Murdoch does not clearly disclose the front facing panel being adjustably attached to the drawer frame members, the two panel portions adjustable relative to one another in the horizontal and vertical directions relative to the drawer frame members, and adjustable in the horizontal and vertical directions relative to each other.

Humphrey teaches the idea of providing a drawer, such as shown in Fig 4, with a front facing panel adjustably attached to drawer frame members 87 via connectors 26, said front facing panel comprising, such as shown in Fig 9, two panel portions 78, 80 adjustable relative to one another (please refer to the examiner's comments below in the "Response to Argument" section for the examiner's interpretations of how Humphrey meets the claimed limitations of "adjustably attached" and "adjustable relative to one another"), and connected to each other by fitments 52,54,82, wherein the structure disclosed by Humphrey provides a knock-down front facing panel with adjustable capability for manufacturing tolerances. Therefore, it would have been obvious to modify the structure of Murdoch by having the front facing panel comprising two panel portions adjustable relative to one another, and connected to each other by fitments for the purpose of providing a knock-down front facing panel with adjustable capability for manufacturing tolerances, as taught by Humphrey, since both teach alternate conventional corner drawer structure, used for the same intended purpose, thereby providing structure as claimed.

10/766,478

Art Unit: 3637

Rock et al teaches the ides of connecting two members of a drawer by providing two panels 4,5 being adjustably connected together in the horizontal and vertical directions relative to each other by at least one fitment in order to overcome manufacturing tolerances. Therefore, it would have been obvious to modify the structure of Murdoch, as modified, by providing structures to the panels of the front facing panel such that the panels being adjustably connected together in the horizontal and vertical directions relative to each other by at least one fitment in order to overcome manufacturing tolerances, as taught by Rock et al, since both teach alternate conventional connecting means for members of a drawer, thereby providing structure as claimed.

(II) Claims 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murdoch, as modified, as applied to claim 27 above, and further in view of AT 404664.

Murdoch, as modified, discloses all the elements as discussed above except for holding members mounted to the panel portions and coupled to spring-loaded arresting members in the drawer frame members, the holding members being fixed to triangular-shaped adaptor portions screwed directly to the panel portions, an inwardly-angled front base panel having openings, the holding members fixed to the front facing panel project through the openings so as to attach the front facing panel to the front base panel.

AT 404664 teaches the idea of a drawer having drawer frame members and a front facing panel, wherein holding members are mounted to the front

10/766,478 Art Unit: 3637

> facing panel and coupled to spring-loaded arresting members in the drawer frame members, the holding members being fixed to triangular-shaped adaptor portions screwed directly to the panel portions, an inwardly-angled front base panel having openings, the holding members fixed to the front facing panel project through the openings so as to attach the front facing panel to the front base panel; wherein the structure discloses by AT 404664 facilitates connecting the front facing panel to the drawer frame members while allowing adjustments between the drawer frame members and the front facing panel to overcome manufacturing tolerances. Therefore, it would have been obvious to modify the structure of Murdoch, as modified, by providing holding members mounted to the panel portions and coupled to spring-loaded arresting members in the drawer frame members, the holding members being fixed to triangular-shaped adaptor portions screwed directly to the panel portions, an inwardly-angled front base panel having openings, the holding members fixed to the front facing panel project through the openings so as to attach the front facing panel to the front base panel in order to facilitate connecting the front facing panel to the drawer frame members while allowing adjustments between the drawer frame members and the front facing panel to overcome manufacturing tolerances, as taught by AT 404664, since both teach alternate conventional drawer structure, used for the same intended purpose of storing objects therein, thereby providing structure as claimed.

(B) Formal Rejection

10/766,478 Art Unit: 3637

Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Since claim 34 recited "at least two angle portions" which is just two angle portions, the recitation in claim 35 of a total of three angle portions renders the claimed indefinite. Should applicant elect to amend claim 35 in order to obviate this rejection, claim 35, line 1, "wherein a first one..." should be amended to read "wherein said at least two angle portions comprises at least three angle portions, a first one..."

(10) Response to Argument

In response to Appellant's arguments on page 5 that Humphrey fails to teach the claimed limitation of the two panel portions 78, 80 being "adjustable relative to one another", the examiner respectfully takes the position that (1) the claimed language of "adjustable relative to one another" fails to provide adequate structural limitations into the claim to define what structural limitations allowing said two panel portions being "adjustable relative to another" in order to distinguish from the prior art of record, and (2) the two panel portions 78, 80 of Humphrey are clearly "adjustable relative to another" prior to being hold in placed by screws 88.

In response to Appellant's arguments on pages 5-6 that Humphrey also fails to teach the claimed limitation of the two panel portions 78, 80 "adjustably attached" to the drawer frame members, the examiner again respectfully takes a similar position to that discussed above. The claimed language of "adjustably attached" fails to provide

10/766,478 Art Unit: 3637

adequate structural limitations into the claim to define what structural limitations allowing said two panel portions being "adjustably attached" to the drawer frame members in order to distinguish from the prior art of record, and that the two panel portions 78, 80 of Humphrey are "adjustably attached" to the drawer frame member via connectors 26.

In response to Appellant's argument on page 6 that Rock fails to "disclose or even suggest a front facing panel adjustably attached to drawer frame members, or a front facing panel including at least two panel portions adjustable relative to one another...", the examiner respectfully takes the position that Rock is not required to specifically teach a front facing panel adjustably attached to drawer frame members, or a front facing panel including at least two panel portions adjustable relative to one another. Rather, Rock is used for the teaching of allowing two members of a drawer adjustably connected to one another in the horizontal and vertical directions in order to overcome manufacturing tolerances.

In response to Appellant's argument on pages 6-7 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

10/766,478

Art Unit: 3637

In response to Appellant's argument on pages 7-8 that Murdoch, as modified, fails to disclose the limitations in claims 29 and 30, the examiner again respectfully takes the position that the claimed language of "adjustable in the horizontal direction" fails to provide adequate structural limitations to the claim in order to distinguish from the prior art of record, and that Murdoch, as modified, is certainly adjustable (emphasis added) in the horizontal direction.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Lanna Mai

Conferees:

Hanh Tran#VT

Lanna Mai LM

Meredith Petravick /mcp/

LANNA MAI SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600

Lamamai

Page 10

10/766,478 Art Unit: 3637

(12) Evidence Appendix

English translation of foreign document NZ507687 to Murdoch (a total of sixteen pages), and foreign document AT 404664 (a total of ten pages) listed under "Evidence Relied Upon".



Intellectual Property Office of New Zealand IP Summary Report

Page 1 of 1
Date 11 September 2001
Time 14 09 39
(ipnp02 3 00 02)

11 September 2001

24 October 2000

(51) Classification:	Status: 70	507687
A47B88/00,	Accepted	Version number. 9
A47B88/04	Client Ref. MF802236	IP type: Patent Non-Convention Complete

Filed

Date actions completed:

Application Accepted

(22) NZ Filing date: 20 October 2000

(71) Applicant: STEPHEN JOHN MURDOCH, 108 Ventry Street,

Alexandra, New Zealand

(72) Inventor: Murdoch, Stephen John

Contact BALDWIN SHELSTON WATERS, Level 14, NCR

House, 342 Lambton Quay, Wellington, New Zealand

Journal: 1467

Office title. Drawer matching the corner profile of a cabinet

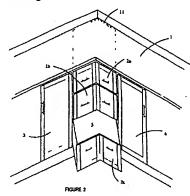
(54) Applicant title: Corner storage compartment

(57) Abstract.

Patent 507687

A corner storage compartment for a cabinet or joinery unit consisting of an open top boxlike container that follows the contours of both the back corner and front of the cabinet as shown in fig 2. The unit slides in and out horizontally on a frame or track and has front-end surface finish to match the rest of the joinery unit or cabinet, with handles to help facilitate the movement of the container. This container is much like a drawer, but adapted to fit in a corner. Also described is a joinery unit consisting of one or more of these containers.

Drawing:



** End of report **

Patents Form No. 5

Our Ref: MF802236

NEW ZEALAND PATENTS ACT 1953 COMPLETE SPECIFICATION

Corner Storage Compartment

I, STEPHEN JOHN MURDOCH, a citizen of New Zealand of 108 Ventry Street, Alexandra, New Zealand hereby declare the invention, for which I pray that a patent may be granted to me and the method by which it is to be performed, to be particularly described in and by the following statement:

• 1

INTELLECTUAL PROPERTY OFFICE OF N.Z.

2 9 MAY 2001

RECEIVED

PT0598159

Corner Storage Compartment

5

Field of the Invention

The invention relates to corner storage compartments for cabinets and other joinery units, and in particular the invention relates to a corner storage compartment for the joinery unit under a kitchen bench.

10

15

20

25

Background to the Invention

How to utilise the space in the corner of a cabinet or joinery unit which fits into the corner of a room has long been a problem. A typical example of such a space is under the corner of a kitchen bench. The storage space in this area is deeper than along the rest of the unit, and placing and retrieving items can pose a difficulty for aged, disabled or less agile individuals. Even healthy, able-bodied persons might find the task of placing and retrieving items from this area awkward.

One solution to this problem is the so-called "Lazy Suzie." A Lazy Suzie is two or more vertically disposed circular or disk shaped shelves on a central rotating axis. Stored items can be placed on the circular shelves which can be rotated through 360° so that the item of interest can be brought to the front of the storage area for easy retrieval. However, the Lazy Suzie suffers from a number of disadvantages. For instance, the shape of the circular shelf limits the size of objects which can be comfortably stored. Further, the circular shelf does not reach right to the back of the storage area thereby creating wasted space, and when the circular shelf becomes cluttered stored objects can easily fall off while it is being rotated. This can be particularly annoying if the object falls into the dead space at the back of the storage

30

compartment.

A further problem with the storage area in the corner of a joinery unit is in providing a closure for the area. It is difficult to get two hinged doors to meet in the oblique corner of the unit without leaving a clearance gap. Without a clearance gap the

3

doors would jam or catch on each other. One method of overcoming this problem is to use a bi-fold door. These doors tend to have complicated hinge mechanisms and even relatively small doors are known to drop or sag after a short period of time.

Accordingly, it is an object of the present invention to provide a corner storage compartment for a cabinet or other joinery unit which overcomes or ameliorates some of the problems with the prior art, or which at least provides the public with a useful choice.

10 Summary of the Invention

In a first aspect the invention provides a corner storage compartment for a cabinet or joinery unit comprising:

an open top boxlike container having at least a first end wall adapted to substantially profile the shape of a corner of a cabinet or joinery unit; and

a frame or track on which the boxlike container can slide substantially horizontally from an in position to an out position, the frame being disposed at the corner of the cabinet or joinery unit; and wherein

when the boxlike container is in the in position the first end wall is substantially flush with the corner of the cabinet or joinery unit, and when the boxlike container is in the out position there is access to the inside of the container where objects may be stored; and wherein

the first end wall has a surface finish to match the surface finish of the cabinet or joinery unit and has a handle, decorative or otherwise, to help facilitate the sliding in and out of the boxlike container.

25

15

20

Preferably a second, or back, end wall of the container is adapted to have the same profile as the first end wall. Alternatively, the second, or back, end wall may be adapted to profile the back of the cabinet or joinery unit when the container is in the in position.

30

Preferably the frame or track on which the boxlike container slides is a drawer frame or track of known type.

OFFICE OF N.Z.

2 0 JUN 2001

RECEIVED

In a second aspect the invention provides for a cabinet or joinery unit having a corner storage compartment as hereinbefore defined.

5 Preferably the cabinet or joinery unit has two or more of said corner storage compartments vertically disposed one on top of the other.

Preferably the cabinet or joinery unit is under a kitchen bench.

10 Brief Description of the Drawings

Further aspects of the invention will become apparent from the following description which is given by way of example only and with reference to the accompanying drawings in which:

Figure 1 illustrates a corner of a kitchen bench unit having corner storage compartments according to the invention, the compartments shown in an in position;

Figure 2 Illustrates the corner of the kitchen bench unit with one corner storage compartment in an out position; and

Figure 3 illustrates a perspective view of a corner storage container according to the invention.

Description of the Preferred Example

The invention will now be described with reference to a kitchen bench unit with storage compartments under it. However, it is envisaged that the corner storage compartment will have application in any cabinet or joinery unit which has a corner or is adapted to fit the corner of a room. Furthermore, the invention is described with reference to an oblique corner, i.e. an inside corner having an angle of less than 180°. It is also envisaged that the invention may have application to outside corners, i.e. corners with an angle of greater than 180°.

30

15

20

25

Figure 1 shows a conventional corner kitchen bench top 1 with joinery and storage compartments under it. On the inside corner of the joinery unit there are three corner storage compartments 2a, 2b and 2c according to the invention. The storage

compartments 2a, 2b and 2c in Figure 1 are illustrated in the closed or in position. Either side of the corner storage compartments 2a, 2b and 2c are conventional storage cupboards 3 and 4. Alternatively, cupboards 3 and 4 could be other storage compartments, for example standard drawers.

5

Figure 2 shows one of the corner storage compartment 2c in its open or out position. In this position there is access to a storage area 5 where objects can be stored.

15

20

10

Figure 3 shows a perspective view of a corner storage compartment 2 removed from the joinery unit. The corner storage compartment 2 is an open top boxlike container having sides 6, 7, 8 and 9. Within the boxlike container 2 is an area 5 for the storage of objects. The first or front end 6 of the boxlike container 2 is shaped to profile the shape of the corner of the joinery unit. The back end 7 of the boxlike container 2 is profiled to match the front end 6. Alternatively, back end 7 could be profiled to match the back of the storage area in the joinery unit. This is illustrated by the dashed line 11 on Figure 2.

The boxlike container 2 has parallel sides 8 and 9 which enable it to slide substantially horizontally on a track or frame (not shown) disposed within the corner of the joinery unit. The sides 8 and 9 may have part of the track or frame attached thereto to aid this purpose. The track or frame may be a standard drawer track or frame of known type.

25

The front end 6 of the boxlike storage container 2 may have decorative panelling 10, or surface finish, attached thereto to match the cabinet or joinery into which it is fitted. It may also have handles 12 and 13, of known type, to aid in sliding it from the in position to the out position and vice versa. The handles 12 and 13 may also be of a decorative nature.

30

Thus according to the invention there is a corner storage compartment for the corner of a cabinet or joinery unit which allows ease of storage and retrieval of objects. As the storage compartment 2 can be made of any length to reach to the back of the

area in the corner of the cabinet or joinery unit - see dashed line 11 on Figure 2 - all of the storage space available is utilised.

Where in the foregoing description reference has been made to specific components or integers of the invention having known equivalents, then such equivalents are herein incorporated as if individually set forth.

Although the invention has been described by way of example and with reference to possible embodiments thereof it is to be understood that modifications or improvements may be made thereto without departing from the scope of the appended claims.

10

CLAIMS

5

10

15

20

1. A corner storage compartment for a cabinet or joinery unit comprising:

an open top boxlike container having at least a first end wall adapted to substantially profile the shape of a corner of a cabinet or joinery unit; and

a frame or track on which the boxlike container can slide substantially horizontally from an in position to an out position, the frame being disposed at the corner of the cabinet or joinery unit; and wherein when the boxlike container is in the in position the first end wall is substantially flush with the corner of the cabinet or joinery unit, and when the boxlike container is in the out position there is access to the inside of the container where objects may be stored; and wherein the first end wall has a surface finish to match the surface finish of the cabinet or joinery unit and has a handle, decorative or otherwise, to

2. A compartment as claimed in claim 1 wherein a second, or back, end wall of the container is adapted to have the same profile as the first end wall.

help facilitate the sliding in and out of the boxlike container.

- 3. A compartment as claimed in claim 1 wherein a second, or back, end wall of the container is adapted to profile the back of the cabinet or joinery unit when the container is in the in position.
- 4. A compartment as claimed in any preceding claim wherein the frame or track on which the boxlike container slides is a drawer frame or track of known type.
- 5. A cabinet or joinery unit having a corner storage compartment comprising:

 an open top boxlike container having at least a first end wall adapted to substantially profile the shape of a corner of a cabinet or joinery unit; and

INTELLECTUAL PROPERTY
OFFICE OF N.Z.

2 0 JUN 2001

RECEIVED

8

a frame or track on which the boxlike container can slide substantially horizontally from an in position to an out position, the frame being disposed at the corner of the cabinet or joinery unit; and wherein when the boxlike container is in the in position the first end wall is substantially flush with the corner of the cabinet or joinery unit, and when the boxlike container is in the out position there is access to the inside of the container where objects may be stored; and wherein the first end wall has a surface finish to match the surface finish of the cabinet or joinery unit and has a handle, decorative or otherwise, to help facilitate the sliding in and out of the boxlike container.

10

5

A cabinet or joinery unit as claimed in claim 5 wherein there are two or more
of said corner storage compartments vertically disposed one on top of the
other.

15

- A cabinet or joinery unit as claimed in either claim 5 or claim 6 which is under a kitchen bench.
- 8. A corner storage compartment, for a cabinet or joinery unit, as herein described with reference to Figure 3.
 - 9. A cabinet or joinery unit as herein described with reference to Figures 1 and 2.

25

STEVEN JOHN MURDOCH

30

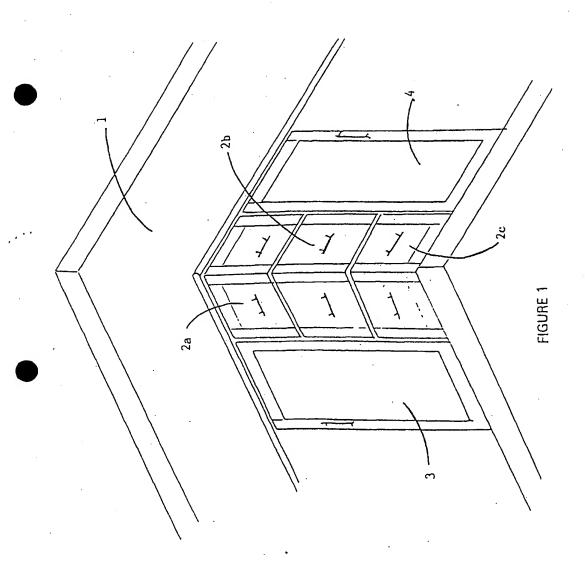
By his Attorneys BALDWIN SHELSTON WATERS

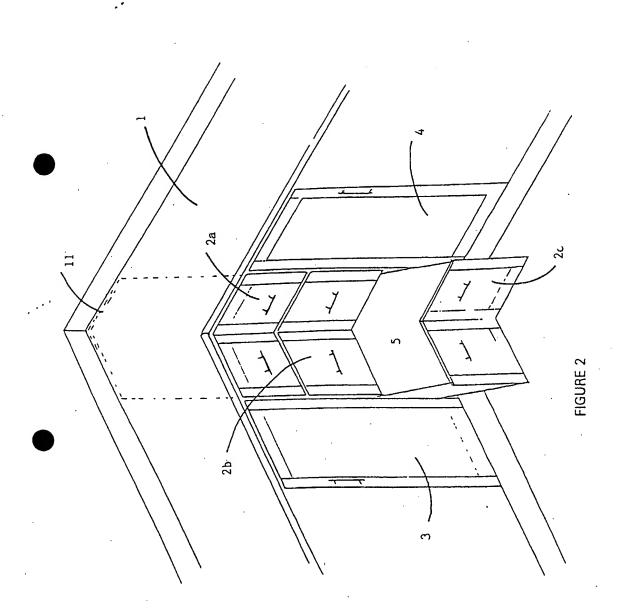
INTELLECTUAL PROPERTY OFFICE OF N.Z.

2 0 JUN 2001

RECEIVED

35 CSPEC95517





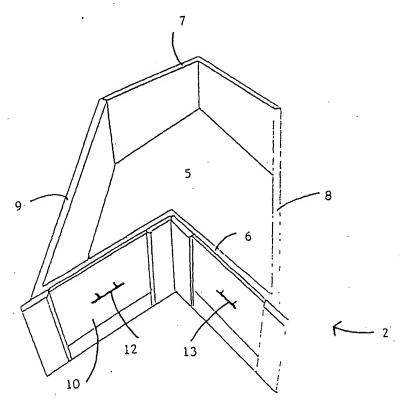


FIGURE 3

DERWENT-ACC-NO:

2001-588481

DERWENT-WEEK:

200166

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE:

Drawer matching the **corner** profile of a **cabinet**

INVENTOR: MURDOCH, S J

PATENT-ASSIGNEE: MURDOCH S J[MURDI]

PRIORITY-DATA: 2000NZ-0507687 (October 20, 2000)

PATENT-FAMILY:

PUB-NO PUB-DATE LANGUAGE PAGES MAIN-

IPC

NZ 507687 A September 28, 2001 N/A 000 A47B

088/00

APPLICATION-DATA:

PUB-NO APPL-DESCRIPTOR APPL-NO APPL-DATE NZ 507687A N/A 2000NZ-0507687 October 20, 2000

INT-CL (IPC): A47B088/00, A47B088/04

ABSTRACTED-PUB-NO: NZ 507687A

BASIC-ABSTRACT:

NOVELTY - A <u>corner</u> storage compartment for a <u>cabinet</u> or joinery unit

of an open top boxlike container that follows the contours of both the back <u>corner</u> and front of the <u>cabinet</u> as shown in fig. 2. The unit slides in and out

horizontally on a frame or track and has front-end surface finish to match the

rest of the joinery unit or cabinet, with handles to help facilitate the

7/10/06, EAST Version: 2.0.3.0

movement of the container. This container is much like a <u>drawer</u>, but adapted

to fit in a corner. Also described is a joinery unit consisting of one or more of these containers.

USE - None given.

CHOSEN-DRAWING: Dwg.1/1

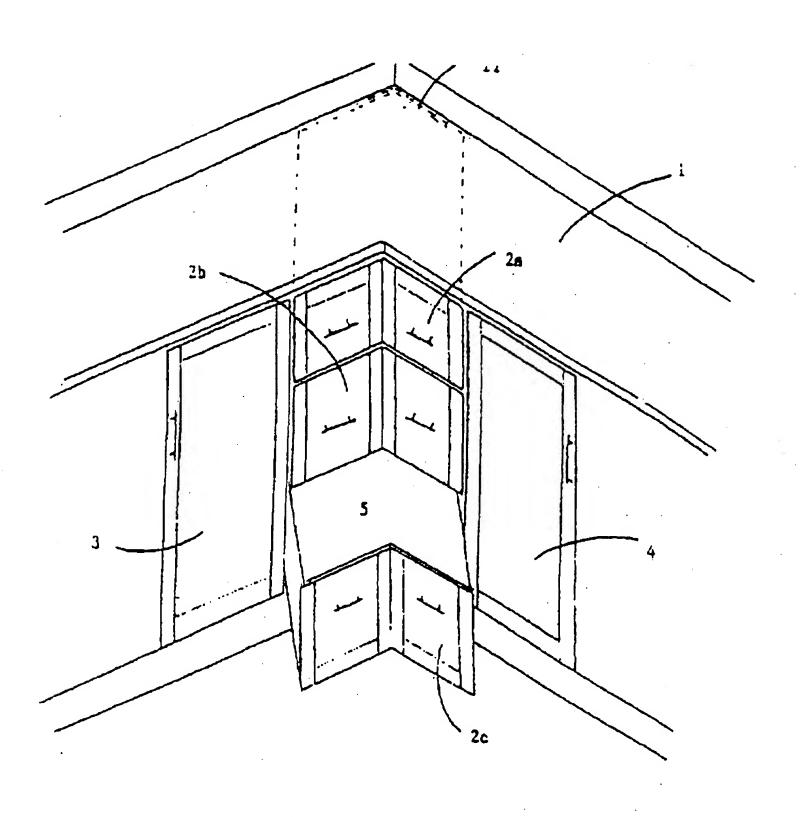
TITLE-TERMS: DRAWER MATCH CORNER PROFILE CABINET

DERWENT-CLASS: P25

SECONDARY-ACC-NO:

Non-CPI Secondary Accession Numbers: N2001-438200

7/10/06, EAST Version: 2.0.3.0



7/10/06, EAST Version: 2.0.3.0

END

DEVICE FOR ATTACHING THE FRONT PANEL OF A DRAWER TO THE MOUNTING FRAME

Publication number: AT404664B

Publication date:

1999-01-25

Inventor:

Applicant:

BLUM GMBH JULIUS (AT)

Classification:

- international:

A47B88/00; A47B88/00; (IPC1-7):

A47B88/00

- European:

A47B88/00F4A; A47B88/00F4

Application number: AT19950000487 19950320 Priority number(s): AT19950000487 19950320

Also published as:

WO9628995 (A1)

EP0814686 (A1)

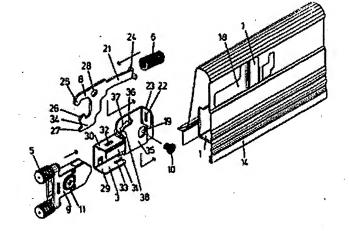
US5860718 (A1)

EP0814686 (A0)

Report a data error here

Abstract not available for AT404664B Abstract of corresponding document: **WO9628995**

The invention concerns a device (20) for attaching the front panel (4) of a drawer to the mounting frame (14). The device has a male coupler part (9) attached to the front panel (4) and a female coupler part (3) attached to the mounting frame (14) on each side of the drawer. The male (9) and female (3) coupler parts are designed to be connected to each other. The device (20) also includes a spring (6) which acts in the direction of the longitudinal axis of the mounting frame (14), between the male (9) and female (3) coupler parts. With the front panel (4) mounted in place, the male (9) and female (3) coupler parts are able to move relative to



each other against the action of the spring (6). Mounted in the female coupler part (3) is a rocker element (8) in which the male coupler part (9) engages. The rocker element (8) is mounted in the female coupler part (3) without a spindle and has a shank (21) by means of which it is secured in place in the female coupler part (3). The spring (6) is of the push-and-pull type. It is mounted on the shaft (21) of the rocker element (8) and pushes the rocker element (8) towards the back of the drawer mounting frame (14).

Data supplied from the **esp@cenet** database - Worldwide



Description of WO9628995

Print

Copy

Contact Us

Close

Result Page

Notice: This translation is produced by an automated process; it is intended only to make the technical content of the original document sufficiently clear in the target language. This service is not a replacement for professional translation services. The esp@cenet® Terms and Conditions of use are also applicable to the use of the translation tool and the results derived therefrom.

Device for the attachment of the front screen of one Drawer at drawer trims the invention refers to a device for the attachment of the front screen of a drawer at drawer trims, with one at the front screen fastened retainer and one to a drawer trim fastened carry-hurries at each side of the drawer, whereby the retainers with the carrying hurrying are domable and a feather/spring, preferably a coil spring, are intended, which in longitudinal direction of the drawer trim between carry-hurry and which is effective retainer, in such a manner that with installed front screen a limited relative motion of the retainer to carry-hurry against the feather/spring effect is possible and whereby in carry-hurry tilt-hurry stores, with which that retainer are hang upable.

A such device is for example well-known from the EU-A1 0,636,327.

A such device offers a shock absorbing suspension except the fast anchorage of the front screen at the drawer trims for the front screen, if the drawer is slid too momentumful into the Möbelkorpus and the front screen at the Korpusseitenwänden fastens. In this way rough vibrations are not only avoided, but also the stop of the pegs, with which the retainers of the device are embodied in the front screen, is improved.

Task of the invention is it to improve a such device and to decrease in particular the constructional expenditure opposite a well-known device.

The task according to invention is solved thereby that tilt-hurry ohless in carry-hurry stores and that to tilt-hurry a handle is trained, with which these in carry-hurries is embodied, whereby the feather/spring, which to carryhurry supports, tilt-hurry in the direction to the rear (i.e. for) the end of the drawer trim turned away from the front plate presses or pulls.

A good and simple anchorage of the feather/spring is obtained by the fact that the feather/spring a pressure and a coil spring is, which stores at the handle and which on lateral notices of the handle presses.

An execution form, which plans, is manufacture technical and inexpensive that the handle with tilt-hurry from steel sheet is punched and by a slot in a bar of the carrying part rises up.

In order to ensure a safe locking and unlocking of the retainers in carrying hurrying, it is favourably intended that tilt-hurry two hooks exhibits, about which in carry-hurry pushed in retainer locked, while the other one than notice for the retainer is trained in the range of the carrying part, whereby the hook designed as notice exhibits a diagonal notice surface for the retainer.

In order the stability of the retainer in carry-hurry to improve, is favourably intended that the hook designed as notice rises up with solved retainer into a slot in a horizontal Führungssteg of the carrying part, and in a further execution form that carry-hurry two horizontal bars exhibits, between which that retainer can be inserted, and that one of the horizontal bars exhibits a to the rear open slot, into which tilt-hurry rises up and whose edges a lateral guidance for tilt-hurry form.

Over the loosening of the front screen and/or. the retainers from to make possible, it is favourably intended the carrying hurrying with an execution form of the invention that tilt-hurry with a hole for the admission of a Phillips screwdriver od.dgl. it is provided and that in carry-hurry a rack profile aligned perpendicularly to the front screen is trained, with which the Phillips screwdriver taken up in the hole of the tilting part combs. The rack profile forms the edge of a slot, whose width in for instance the diameter of the hole in tilt-hurry corresponds.

So that tilt-hurry when unlocking easily upward one presses, it is intended with a further execution form that the rack profile exhibits an arc-shaped section with its end arranged to the front screen.

In order to thus limit the spring travel of the embodied retainer and the front screen, is intended with a further execution form of the invention that tilt-hurry a notice arranged to the front screen exhibits, with which it to carry-hurry pushes, if course is exercised on of the tilting hurrying locked front screen.

In the following a remark example of the invention is described on the basis the figures of the enclosed designs.

- Fig. 1 shows look-figurativy a Möbelkorpus with a drawer, whereby the front screen within the range of one Drawer trim low-cut out drawn and the encircled cutout is also increased represented.
- Fig. 2 to 4 shows side views of the mounting devices according to invention in different stages of hanging up the front screen.
- Fig. 5 shows look-figurativy the parts of the mounting device before hanging up the front screen.
- Fig. 6 shows look-figurativy the parts of the mounting device with retainer hung up into the carrying hurrying.
- Fig. 7 < RTI ID=4.1> zeiat< /RTI> a Stirnansicht of the mounting device

and a front screen.

Fig. a side view of the mounting device shows 8 with hung up front screen.

Fig. 9 look-figurativy the mounting device according to invention and schematically the rotation of the tilting part shows, in order the retainer of carry-hurries to solve.

Fig. a side view of the mounting device and schematically the rotation of the tilting part shows 10 during the release action.

Fig. the same side view shows 11 as the Fig. 10 with completely loosened retainer and Fig. 12 shows look-figurativy and pulled apart the parts of the 3efestigungsvorrichtung and the drawer trim.

In the Fig. 1 is shown a Möbelkorpus with side panels 12 and a Oberboden 2, in which a drawer is led. At each furniture side panel (not represented) a mounting rail for the drawer is fastened.

The front screen 4 of the drawer is fastened by means of the mounting devices according to invention 20 to the drawer trims (drawer side panels) 14.

Each drawer trim 14 exhibits a lateral recess 18 in the outside taking off bar with its front end, which permits the access of a tool to the mounting device 20. At the internal end of the drawer a rear wall 13 fastened to the drawer trims 14 is.

The drawer soil 7 supports itself at lower horizontal bars 17 14 profiles 15 (Fig used by into the drawer trims. 7) and/or at horizontal bars of a taking off rail connected with the drawer trim off. Between the korpusseitigen mounting rail and the drawer-lateral taking off rail can at each side of the drawer a center rail for differential and/or. Telescope excerpts arranged its.

The drawer trim 14, like in particular from the Fig. evidently, when double-walled trim is implemented, the rails of the taking off guidance set and the mounting device according to invention 20 takes 7 off and 12 for the attachment of the front screen 4. Regarding the function of the mounting device 20 is the taking off rail part of the drawer trim 14. The mounting device 20 can be installed both at the drawer trim 14 or at the taking off rail.

As best from Fig. evidently, the mounting device according to invention 20 exhibits 5 and 6 retainer 9, which strengthens with pegs 5 at the front screen 4 is. Carry-hurries 3 intended, which stores on a baseplate 1, those is drawer lateral on a profile 15 inserted into the drawer trim 14 directly fastened is (Fig. 7). The profile 15 can exist over the length of the drawer trim 14 going through a profile or from several pieces of profile arranged one behind the other in trim longitudinal direction with distance. The drawer-lateral taking off rails are fastened to the profiles 15, favourably into these hung up.

That carry-hurry 3 is by means of a clamping screw 10 (Fig.

1, cutout), which rises up by a hole 19 of the carrying part of 3, höhenverstellbar at the baseplate 1 fastens. The hole 19 is square in the remark example. It is so largely selected that before wedging the carrying part of 3 a movement of the carrying part 3 relative to the clamping screw 10 is possible. In the retainer 9 an adjusting bolt 11 for the lateral setting of the front screen 4 is stored.

To carry-hurry 3 actual like almost all figures show tilt-hurry 8 ohless stored, which is punched from steel sheet preferably. That tilt-hurry 8 exhibits a handle 21, which rises up by a slot 22 in a bent rag 23 of the carrying part of 3. On the handle 21 the feather/spring 6 implemented as pressure and coil spring stores, on the one hand to carry-hurries 3, e.g. at the rag 23 and on the other hand to tilt-hurry 8, e.g.

at lateral bent notices supports 24 of the handle 21.

That tilt-hurry 8 is provided at his front ends with two each other againstarranged hooks 25, 26 and a lower notice 27. Further tilt-hurries 8 points a hole 28 up, that depresses a screwdriver 16 permitted (Fig. 9/10).

That carry-hurry 3 points, like in particular from Fig. 8, Fig.

9 and Fig. 12 evidently, a front box shaped range up, within which it is provided with an upper horizontal bar 30, a lower horizontal bar 29 and a vertical edge bar 31 bent by the upper horizontal bar 30. The upper horizontal bar 30 exhibits a slot 32, in that, as from the Fig.

5 evidently, with of carry-hurry 3 loosened retainer 9 the hook 25 of the tilting part of 8 engages. The lower horizontal bar 29 exhibits a to the rear open slot 33, into that tilt-hurries 8 with its lower arm 34, at which the hook 26 and the notice 27 are trained, rises up. Further is carry-hurries 3 in its mounting plate 35 provided with a slot 36, which is limited at its top margin by a rack profile 37. The rack profile 37 and the slot 36 are provided with the front end with an arc-shaped section 38.

Before hanging up the front screen 4 into the drawer trim 14 the retainers 9 fastened by means of the pegs 5 to the front screen 4 are, and the carrying hurry 3 with the tilting hurrying 8 are by means of the screw 10 with the baseplate 1 bolted and thus within the drawer trim 14 fastened.

That tilt-hurry 8 is thereby in the Fig. 2 position shown. Becomes now that retainer 9 in the direction of the arrow of the Fig. 2 and 3 into the box shaped range of the carrying part pushed in, whereby he is led between the horizontal bars 29, 30, it knocks against with an edge 39 at a slant 40 of the hook 25 and presses tilt-hurries 8 in from the arrows of the Fig. 3 indicated direction upward and moves this in the clockwise direction. Thus the lower hook 26 of the tilting part of 8 behind a bar 41 of the retainer 9 engages and that retainer 9 is, as in the Fig. 4 shown, in carry-hurry 3 locked. That tilt-hurry 8 and that retainer 9 with the front screen 4 now by the feather/spring 6 to the rear are thus pulled and thus the Fronblende 4 on the front surfaces of the drawer trims 14 pressed.

If the drawer is pushed in in the Möbelkorpus and the front screen 4 too firmly fastens at the Stirnkanten of the furniture side panels 12, then itself carry-hurries 3 together with the drawer trim 14 a short piece of the retainer 9 can away to move, so that the drawer takes off to a certain extent from the front screen 4 and into the Möbelkorpus in-continues to drive. If the module energy is destroyed, the drawer trims 14 by the feathers/springs 6 are pressed the front screen 4.

So that the front screen 4 does not load the feathers/springs 6 too much when pulling the drawer out, 8 is the notice 27 intended, that, if tilt-hurry 8 its foremost position reached, at the end of the slot 33 at the horizontal bar 29 of the carrying part knocks against to tilt-hurries.

If the front screen 4 is to be loosened from the drawer trims, the screwdriver becomes 16, as in the Fig. 9 and 10 shown, by the hole 28 of the tilting part of 8 put, so that it < with its point with the rack profile 37; RTI ID=8.1> irn</r> |RTI| = 8.1> irn</r>
<math>|RTI| = 8.1> irn</r>

In order to use Kraft of the feather/spring 6 optimally, the handle 21 is curved implemented, preferably provided with a break, so that the free end of the handle 21 with the notices 24 with engaged retainer, as in the Fig. 8 shown, easily downward arranged is.

The stability of the mounting device 20 is improved by the fact that tilt-hurry 8 with its arm 34 in the slot 33 and in the Lösestellung additionally with its hook 25 in the slot 32 of the carrying part of 3 is held.



Claims of W09628995

Print

Copy

Contact Us

Close

Result Page

Notice: This translation is produced by an automated process; it is intended only to make the technical content of the original document sufficiently clear in the target language. This service is not a replacement for professional translation services. The esp@cenet® Terms and Conditions of use are also applicable to the use of the translation tool and the results derived therefrom.

V

Patent claims: 1., With one at the front screen (4) fastened device for the attachment of the front screen (4) of a drawer at drawer trims (14) retainer (9) and one at a drawer trim (14) carry-hurries (3) to each side that fastened

Drawer, whereby the retainers (9) with carry divide (3) are domable and a feather/spring (6), before a zugsweise coil spring, is intended, which in longitudinal direction of the drawer trim (14) between carry-hurry (3) and the retainer (9) is effective, in such a manner that with installed front screen a limited relative motion of the retainer (9) to

Carry-hurry (3) against the spring action is possible and whereby in carry-hurry (3) tilt-hurry (8) stores, with which that is hang upable retainer (9), by the fact characterized that tilt-hurry (8) ohless in

Carry-hurry (3) it stores and that to tilt-hurry (8) in

Handle (21) is trained, with the this in

Carry-hurry (3) is embodied, whereby the feather/spring (6), which to

- ▲ carry-hurry (3) supports, which tilt-hurry (8) in the direction for the rear top end of the Schubla denzarge (14) presses or pulls.
 - 2. Device according to requirement 1, thus identified-calibrate net that the feather/spring (6) is pressure and screws a feather/spring, which at the handle (21) and which on lateral notices (24) at the free end of the Stie les (21) stores presses.
 - 3. Device according to requirement 1, thus identified-calibrate net that the handle (21) with tilt-hurry (8) out Steel sheet is punched and by a slot (22) in a bar (23) of the carrying part (3) rises up.
 - 4. Device after one of the requirements 1 to 3, there through characterized that tilt-hurry < RTI ID=11.1> t85< /RTI> two Hook (25, 26) exhibits, about which into that

Carry-hurry (3) pushed in retainer (9) arre tiert, during the other one than notice for that

- Retainer (9) within the range of the carrying part (3) ausge forms is.
- 5. Device according to requirement 4, thus identified-calibrate net that the hook (25), designed as notice, with solved retainer (9) into a slot (32) in a horizontal Führungssteg (30) carry part (3) rises up.
- 6. Device according to requirement 4, thus identified-calibrate net that the hook (25), designed as notice, exhibits a diagonal notice edge (40) for the retainer (9).
- 7. Device after one of the requirements 1 to 6, there through characterized that tilt-hurry (8) with a hole (28) for the admission cross screws of a ziehers (16) od.dgl. is provided and that in carry part (3) perpendicularly to the front screen (4) from arranged rack profile (37) is trained, with which in the hole (28) of the tilting part (of 8) taken up Phillips screwdrivers (16) it combs.
- 8. Device according to requirement 7, thus identified-calibrate net that the rack profile (37) the edge one Slot (36), its width in approximately that forms Diameters of the hole (28) in tilt-hurry (8) ent speaks.
- 9. Device according to requirement 7 or 8, ge thus marks that the rack profile (37) exhibits arranged end an arc-shaped section with its to the front screen (4).
- 10. After device < RTI ID=12.1> einemd< /RTI> it requirements 1 to 9, since through characterized that tilt-hurry (8) one to the front screen (4) arranged notice (27) to points, with which it to carry-hurry (3) pushes, if course dazzles on of the tilting hurrying (8) locked front (4) is exercised.
- 11. Device according to requirement 4, thus identified-calibrate net that entgegenge arranges the hooks (25, 26) each other is.
- 12. Device after one of the requirements 1 to 11, there through characterized that carry-hurry (3) two
 It exhibits horizontal bars (29, 30) between which that retainer (9) can be inserted, and that one of the horizontal bars (29) a to the rear open Slot (33) exhibits, into which tilt-hurry (8) rises up and whose edges a lateral guidance for tilt-hurry (8) form.
- 13. Device after one of the requirements 1 to 12, there through characterized that the handle (21) of the Hal of teteiles (8) exhibits a break.

